

REMARKS

Claims 1-7 are now pending in the application. Applicant amends claims 1-7 herein. Support for the amendments can be found throughout the specification, claims and drawings as originally filed. For example, see line 25 of page 1 to line 2 of page 2; lines 6-7 of page 2; lines 7-13 of page 3; line 4 of page 5; lines 17-18 of page 10; and lines 6-8 of page 11 in the written description. Accordingly, no new matter is added. Applicant respectfully requests reconsideration and withdrawal of the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-2 and 4-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Onozawa (JP 11-095324). This rejection is respectfully traversed. Notwithstanding Applicant's traverse and solely in the interest of expediting prosecution, Applicant amends independent claims 1 and 5.

Amended claim 1 recites a projector comprising: an ultrasonic speaker; a visual information generation unit that generates visual information relating to a spatial area in which a playback signal of an audio frequency band of the ultrasonic speaker is reached; and an image projection unit that displays the visual information generated by the visual information generation unit on a screen.

Amended claim 5 recites a method for displaying a spatial area in which a playback signal of an audio frequency band of an ultrasonic speaker is reached, in a projector equipped with the ultrasonic speaker, the method comprising the steps of: generating visual information relating to the spatial area in which the playback signal of

the audio frequency band of the ultrasonic speaker is reached, and displaying the visual information generated in the step of generating visual information on a screen.

Thus, amended claims 1 and 5 now both recite visual information relating to a spatial area in which a playback signal of an audio frequency band of the ultrasonic speaker is reached. For anticipation to be present under 35 U.S.C §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. Scripps Clinic & Res. Found. V. Genentech, Inc., 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. Constant v. Advanced Micro-Devices, Inc., 7 USPQ.2d 1057 (Fed. Cir. 1988). Here, Onozawa fails to disclose, at least, the limitation of visual information relating to a spatial area in which a playback signal of an audio frequency band of the ultrasonic speaker is reached, as claims 1 and 5 recite.

More particularly, the Office Action alleges at pages 2 and 5 that a controlling element 11 disclosed in FIG. 1 of Onozawa generates visual information relating to a sound reproduction range of an ultrasonic output element 24 disclosed in FIG. 3 of Onozawa. Applicant respectfully disagrees with this characterization of Onozawa as it relates to the claimed invention.

Paragraph 15 of Onozawa discloses a system for measuring the distance to a screen S. An ultrasonic wave output element 24 is driven so that an ultrasonic wave signal is emitted towards the screen S. A reflection sound reflected from the screen S is then converted to a reception signal. This reception signal is used to generate a

reception timing pulse. Further, this reception timing pulse is used to compute the distance to the screen S. See column 6, paragraph 15 of Onozawa.

In view of the above description, it is clear that the system for measuring the distance disclosed in Onozawa does not require a visual representation of the sound reproduction range of the ultrasonic speaker. As such, Onozawa does not employ visual information relating to a spatial area in which a playback signal of an audiofrequency band of the ultrasonic speaker is reached.

Further, Onozawa does not teach or suggest a system that includes an operational unit which generates the visual information. Nonetheless, the Office Action asserts at page 5 that the controlling element 11 in Onozawa “performs adjustments to the image.” It appears that this allegation is based on the assumption that, since the controlling element 11 performs overall control of the device including the actuator which drives the ultrasonic output element, the controlling element 11 inherently generates visual information relating to a sound reproduction range of the ultrasonic speaker. See pages 2 and 5 of the Office Action. Again, Applicant respectfully disagrees with this characterization of the controlling element 11 in Onozawa.

Instead, Onozawa teaches that a user manipulates the controlling element 11 while looking at the menu screen shown in FIG. 5 to adjust the optical axis and the focus of the projector. See column 5, paragraph 12 of Onozawa. As indicated in FIG. 5, the menu screen shows a list of screen sizes in inches. The menu screen also shows the word “unspecified.” See FIG. 5 of Onozawa. In this way, the controlling element 11 allows the user to choose a size from a list displayed on the menu screen,

or leave the size unspecified. Therefore, the controlling element 11 does not generate visual information relating to a sound reproduction range of an ultrasonic speaker.

In view of the foregoing, it can be appreciated that Onozawa fails to disclose, at least, "visual information relating to a spatial area in which a playback signal of an audiofrequency band of the ultrasonic speaker is reached," and a "visual information generation unit" which generates the visual information.

Since Onozawa fails to teach or suggest all of the claim limitations, Onozawa cannot anticipate claims 1 and 5. Therefore, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 2 and 4 depend from claim 1 and should be in condition for allowance for at least the same reasons as set forth above.

Claim 6 and 7 depend from claim 1 and should be in condition for allowance for at least the same reasons as set forth above.

REJECTION UNDER 35 U.S.C. § 103

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being obvious over Onozawa (JP 11-095324) in view of Matsuzawa et al. (U.S. Pub. No. 2006-0033882). This rejection is respectfully traversed. Notwithstanding Applicant's traverse and solely in the interest of expediting prosecution, Applicant amends claim 3. Claim 3 depends from claim 1 and should be in condition for allowance for at least the same reasons as set forth above.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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